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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,797	06/27/2003	Sook Jin Lee	049128-5108	5883
9629	7590	12/14/2005	EXAMINER	
MORGAN LEWIS & BOCKIUS LLP 1111 PENNSYLVANIA AVENUE NW WASHINGTON, DC 20004			YACOB, SISAY	
			ART UNIT	PAPER NUMBER
			2635	

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/606,797

Applicant(s)

LEE, SOOK JIN

Examiner

Sisay Yacob

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1 The application of Lee "Touch panel device and method of fabricating the same" filed on June 27, 2003 has been examined.

Claims 1-18 are pending.

Claim Rejections - 35 USC § 102

2 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(e) The invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3 Claims 1 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese publication of Matsuzaki (10-91345).

4 As to claims 1 and 11, Matsuzaki discloses a touch panel device and a method of fabricating the same (Par. 0014, line 1; Item 19 of figure 1) comprising a wiring terminal (Par. 10; Items 3 and 9 of figure 1), a flexible printed circuit film connected to the wiring terminal (Items 12 and 14 of figure 1; Par. 0012, lines 3-

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12), an adhesion part corresponding to a location where the flexible printed circuit film is connected to the wiring terminal (Item 6 of figure 1; Par. 0012, lines 12-18), and an adhesion-reinforcing part adjacent to the adhesion part for strengthening an adhesive bonding strength of the adhesion part (Par. 0013, lines 1-4; Item 16 of figure 1).

Claim Rejections - 35 USC § 103

5 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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6 Claims 2-5, 8, 9 and 11-14, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuzaki in view of US patent of Diessner (6,108,211).

7 As to claims 2 and 11, the device and method according to claims 1 and 10, however, Matsuzaki does not expressly disclose the flexible printed circuit film includes a bend part where the flexible printed circuit film is bent toward a rear surface of the touch panel device at the adhesion part and includes a "U" shaped portion at the rear surface of the touch panel. In the same field of endeavor of an electrical contact signal, Diessner discloses a flexible printed circuit film includes a bend part where the flexible printed circuit film is bent toward a rear surface of the touch panel device at the adhesion part and includes a "U" shaped portion at the rear circuit surface of the touch panel (Col. 4, lines 54-67; Col. 3, lines 9-17, Col. 4, lines 12-53; See figure2; Items 22, 28, 48, 49 and 52 of figure 4).

It would have been obvious, to one ordinary skill in the art, at the time of the invention, to modify the touch panel device and method of Matsuzaki, by incorporating a flexible printed circuit film that includes a bend part, bent toward a rear surface of, as taught by Diessner, to develop the a touch device and method that a flexible printed circuit film includes a bend part where the flexible printed circuit film is bent toward a rear surface of the touch panel device at the adhesion part and includes a "U" shaped portion at the rear surface of the touch panel, because Matsuzaki discloses a touch panel device and method with a wiring

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terminal, a flexible printed circuit film connected to the wiring terminal, an adhesion part corresponding to a location where the flexible printed circuit film is connected to the wiring terminal, an adhesion-reinforcing part adjacent to the adhesion part for strengthening an adhesive bonding strength of the adhesion part and Diessner discloses a touch device that incorporates a flexible printed circuit film includes a bend part where the flexible printed circuit film is bent toward a rear surface of the touch panel device at the adhesion part and includes a "U" shaped portion at the rear circuit surface of the touch panel for making a quick and reliable contact.

8 As to claims 3 and 12, the device and method according to claims 2 and 11, further, Matsuzaki discloses the adhesion-reinforcing part includes the bend part and a double-sided tape that bonds the bend part to the rear surface of the touch panel (Par. 0012, lines 12-18; Par. 0013, lines 1-4; Item 6 of figure 1; Item 16 of figure 1).

9 As to claims 4 and 13, the device and method according to claims 1 and 10, however, Matsuzaki does not expressly disclose providing a touch controller for reading a coordinate signal transmitted from the touch panel to control the touch panel, and a printed circuit board upon which the touch controller is mounted and to which the flexible printed circuit film is bonded. Applicant admitted prior art discloses a touch panel device that has touch controller for reading a coordinate signal transmitted from the touch panel to control the touch

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panel, and a printed circuit board upon which the touch controller is mounted and to which the flexible printed circuit film is bonded (See figure 1).

It would have been obvious, to one ordinary skill in the art, at the time of the invention, to modify the touch panel device and method of Matsuzaki, by incorporating the touch panel device that has touch controller and a printed circuit board upon which the touch controller is mounted and the flexible printed circuit film is bonded, as taught by applicant's admitted prior art, to develop the a touch controller and method for reading a coordinate signal transmitted from the touch panel to control the touch panel, and a printed circuit board upon which the touch controller is mounted and to which the flexible printed circuit film is bonded, because Matsuzaki discloses a touch panel device and method, a printed circuit board upon which the touch controller is mounted and to which the flexible printed circuit film is bonded and applicant's admitted prior art discloses a touch controller and method for reading a coordinate signal transmitted from the touch panel to control the touch panel, and a printed circuit board upon which the touch controller is mounted and to which the flexible printed circuit film is bonded.

10 As to claims 5 and 14, the device and method according to claims 4 and 13, further, Matsuzaki discloses the adhesion-reinforcing part is formed on a surface of the printed circuit board to cover the touch controller and the flexible printed circuit film (Par. 0013, lines 1-4; Item 16 of figure 1).

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11 As to claims 8 and 17, the device and method according to claims 1 and 10, further, Matsuzaki disclose for spacers disposed in a space between an upper substrate and a lower substrate (Par. 0009, line 7; Item 4 of figure 1), a first electrode layer formed at a rear surface of the upper substrate (Par. 0015, line 1; Item 8 of figure 1), a first signal line extending from the first electrode layer to electrically connect with the wiring terminal (Items 9 and 14 of figure 1), a second electrode layer formed on the lower substrate (Par. 0014, lines 6-8; Item 2 of figure 1), and a second signal line extending from the second electrode layer to electrically connect with the wiring terminal (Items 3 and 12 of figure 1).

12 As to claims 9 and 18, the device and method according to claims 1 and 10, further, Applicant admitted prior art discloses a display panel (Page 1, Par. 0006; Item 2 of figure 1), a backlight device disposed on a rear surface of the display panel to radiate light to the display panel (Item 3 of figure 1).

13 Claims 6, 7, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuzaki in view of US patent of Sera et al., (5,461,202).

14 As to claims 6 and 15, the device and method according to claims 1 and 10, however, Matsuzaki does not expressly disclose the adhesion-reinforcing part includes a solder portion that passes through the adhesive part and contacts the wiring terminal. In the field of flexible wiring board and its fabrication method, Sera et al., discloses adhesion part that includes a solder portion that passes

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through the adhesive part and contacts the wiring (Col. 3, lines 35-67; Col. 4, lines 1-21; Items 5 of figures 1 and 2 b and c).

It would have been obvious, to one ordinary skill in the art, at the time of the invention, to modify the touch panel device and method of Matsuzaki, by incorporating the adhesion part that includes a solder portion Sera et al., in order to have the adhesion-reinforcing part includes a solder portion that passes through the adhesive part and contacts the wiring terminal, because Matsuzaki discloses the contacts the wiring terminal for flexible wire circuits with adhesion-reinforcing and Sera et al., discloses adhesion flexible wire circuit films that includes a solder portion that passes through the adhesive part and a method to provide a flexible wiring board characterized by low resistance in wiring circuits, good solderability, excellent durability against bending strains, or the like.

15 As to claims 7 and 16, the device and method according to claims 1 and 10, further as it set forth above in claims 6 and 15, it would have been obvious, to one of ordinary skill in the art, at the time of the invention to, to modify the combination of Matsuzaki and Sera et al., adhesion-reinforcing part and the solder portion that passes through, in order to have the flexible printed circuit film the adhesion-reinforcing part includes a solder portion that passes through the flexible printed circuit film at a region between an end portion of the wiring terminal and the adhesive part on one side of the wiring terminal, and contacts the wiring terminal, because Sera et al., discloses adhesion flexible wire circuit films that includes a solder portion that passes through the adhesive part and a

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method to provide a flexible wiring board characterized by low resistance in wiring circuits, good solderability, excellent durability against bending strains, or the like and one of ordinary skill in the art recognizes having the adhesion-reinforcing part includes a solder portion that passes through the flexible printed circuit film at a region between an end portion of the wiring terminal and the adhesive part on one side of the wiring terminal, and contacts the wiring terminal may further increase the durability and conductivity of the flexible printed circuit film.

Conclusion

16 The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following cited arts are further to show the state of art related to Touch panel device and method of fabricating the same.

In the US patent of (4,413,252) disclose a capacitive switch and panel.

In the Japan publication (8-54985) discloses a transparent touch panel.

17 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sisay Yacob whose telephone number is (571) 272-8562. The examiner can normally be reached on Monday through Friday 8:00 AM - 4:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on (571) 272-3068. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sisay Yacob

12/09/2005

S-Y

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